

room or space taken up for boilers, as in the case of steam. It can be taken any where about the premises where a gas pipe can be carried, and may be applied to the smallest machine where only foot power is required, but where as in the case of the sewing machine, it is desirable to save the foot from fatigue. It is always ready, without kindling any fire to get up steam. In the most unexpected necessity at a moment's warning, all you have to do is to turn a faucet, and you have power, as easily as you have gas or water from their respective pipes. I have seen running with this power, the large factory engine, and the little toy engine with cylinder no larger than a pint measure, and yet doing the work of a foot treadle. The blacksmith has disposed of his bellows, taking his blast direct from a pipe of this compressed air. Gentlemen have this power in their private work rooms, where with a small turning lathe, they are not in the habit of spending leisure hours. The air is perfectly dry, and of course all danger of freezing of pipes, so troublesome in the use of steam, is avoided. There being no loss of power in transportation (as by condensation with steam), it can be carried long distances and made available throughout the town. At the distance of a mile from the air pump, the pressure gauge shows very little diminution of force, even by friction. Possibly it might not be available for very large engines, and would not be needed, as there need not be any great pressure. But we want to have independent power for them. But for the "thousand and one" pu posse for which power is wanted, and which are too small to afford a steam boiler and engine, this plan is invaluable, and for all factories of medium size it promises convenience and saving. The largest engine I happen to have seen it used for is fifteen horse power, and they were convinced that more work was done by it than by an equal pressure of steam. In fact it is a general test of those who are using the compressed air, that it gives more power than they got by steam, which is perhaps due to the condensation of steam in the engine and pipes. It is used in the ordinary steam engine, without any change or adjustment. The same pipe carries air instead of steam to the cylinder, and the same governor controls its supply. At the railroad depot they have used a fifteen horse engine for pumping and sawing wood. The boiler is now useless, and the work is better done by air. They also have now a nice improvement over the old pump at the depot. A small air tight reservoir is provided, into which the water runs by gravity. This is at the surface of the ground. But the water is wanted in an elevated tank. When the small tank is full, the compressed air is turned into it, and by its pressure naturally forces the water into the upper tank, and all pumping is dispensed with.

The pipes in this village are under ground, and the proprietor here thinks that they might be more readily carried on poles above ground. The expansion and contraction would be provided for, at the curves and turns in the route. The condensers are here run by water power, and are kept cool by a constant stream of water. About a mile of pipe is in use, and the investment pays at the beginning, on a very small number of consumers. The outlay has been some \$5,000 or \$6,000. Having occupied so much of your space, I will not go further into particulars, but will only say that should information be desired, I am told that the patent right for New Jersey is held by Messrs. Baird & Gifford, New Bedford, Mass. There is a patent on the adjustment inside the mains to obviate friction, without which it is said that the results reported could not be attained.

G. E. H.

## Bloomfield Topography.

**Mines.**—The Terrein of Bloomfield is singularly fortunate for its future development; it is only important that citizens of liberal minds and large (i.e. not narrow) views take a leading interest in conforming its development to the terrain. Unfortunately, it usually happens that places emerging from darkness to enter upon their march cityward become a prey to greed and greed. Everybody wants his own property improved without regard to how it may affect others of the community. That we may escape error in this direction, let us heed the counsel of military experience. When a general chooses a field of battle or a camp, he considers first of all what, in military science, is called its *terrein*. He studies the *courses* of its streams, the shape and direction of its hills, the direction and crossings of its roads, and familiarizes himself with all the elements of topography. Now, in laying out a town observation must in like manner be taken of its *terrein*! Its principal streets should run parallel with its principal hills; its probable centre must be ascertained and communication from that centre to its exterior lines must be opened. Then, too, it must be borne in mind that its probable growth, if we may be allowed a paradox, will be greater than seems probable. Now let us apply these principles to Bloomfield, and see what we have to do. The hill ranges around us are fortunately about parallel with one another, and our principal river—*to wit*, the canal—runs in the same direction. These indicate the proper direction for our principal thoroughfares, which should be called *Avenues*. Conforming to these, we have the street along the west bank of the canal, the street along the west of the green (Broad St.) and Ridgewood Avenue, about parallel with the hills and with one another. Thus we have the outline of our avenues. A few incomplete ones need to be extended, and some others opened, and our longitudinal thoroughfares are complete. Hillside Avenue, Midland Avenue, and perhaps one through avenue somewhere between Broad Street and the canal, and some others east of that limpid stream, with provision for the extension of all north and south in direct lines at no distant day, will provide us with very satisfactory avenues. Now for our cross streets—*East and West*, and here our confusion begins. For while they are generally about parallel one with another, there is hardly one that forms a continuous line for any considerable distance. Some jog here and some jog there, but nearly all become disengaged by the time they reach the Green, and inconsequently stop.

We want, before we go further in laying out streets, to remedy this. Let Belleville Avenue be pushed West, past the Cemetery, till it reaches Bloomfield Avenue, and let Beach Street—where it crosses the Green, have its west end rounded off so that it may run into the street that delves into Broad Street, between Dr. Doid's and the "palatial" manse of the Presbyterian Church; eventually that road as well as Liberty Street must be extended West from their junctions with the turnpike, across Ridgewood Avenue to the Montclair line. Now, let these streets bridge the canal, each for each, and reach East to the crest of the Eastern highland, and eventually to the Belleville line; and let the

same general plan be followed of extending parallel streets across from the East to the West of the township, North and South of the streets already mentioned, and our rectangular roadways will be pretty satisfactory. But experience has proved that cities laid out with all their streets at right angles are not satisfactory; there need to be some diagonal avenues to facilitate rapid communication from centre to circumference. We have already several such; as the Turnpike, now Bloomfield Avenue, and Prospect Avenue leading to Orange; Bloomfield Avenue and Franklin Street, "Old Road," running South-east to Newark. But we want, and at no distant day will imperatively need, two more, starting from the northern end of the Green, and running the one North-east and the other North-west, at an angle of nearly 30 degrees with Broad Street. With such modifications as we have suggested, we think our village would be a model for topography. But anyone can see the importance of not leaving the locating of new roads to the individual caprice of the party or parties through whose land they may happen to run.

October 24th, 1872.

## POLITICAL.

We are on the eve of the most important election held since that of 1860. All important principles and momentous interests are involved. The grand inquest of the nation is to deliver its opinion next Tuesday. Its "finding" will be in accordance with the wishes of the people. It is, beyond all question, the high patriotic and Christian duty of every citizen, after considering well the questions at issue, and the character and qualifications of the candidates presented for his suffrage, to deposit his vote as the expression of his individual verdict, whatever side he espoused. We have taken no public part in the campaign, but we cannot do less than give the names of candidates to be voted for by citizens of Montclair and Bloomfield, simply remarking that we shall not fail to do ourselves, as we earnestly recommend others to do, and we intend to vote for men that are known and tried and proved good, capable and true.

## ELECTION OF 1872.

## TICKETS FOR BLOOMFIELD AND MONTCLAIR.

## REPUBLICAN NOMINATIONS.

For President.—ULYSSES S. GRANT.  
For Vice-President.—HENRY WILSON.

Electors.—Chas. S. Olden, Selden T. Scranton, Samuel H. Green, A. S. Livingston, Amos Clark, Jr., Hugh M. Gaston, Edw. A. Walton, Fredonia III, Amader Spode.

For Congress.—Marcus L. Ward, Senator.—John W. Taylor, Assemblyman.—James F. Sherrill.—James S. Gamble, County Clerk.—Frederick H. Moore.—Alfred P. Munro, W. W. V. Vreeland, Herman Stoeckel.

DEMOCRATIC NOMINATIONS.

For President.—HORACE GREELEY.  
For Vice-President.—GRATZ BROWN.

Electors.—Geo. R. McCallum, Abram, Browning, Robt. Nevell, Jas. S. Noble, Chas F. Davenport, Chas. Stegeman, Jas. Ryle, Jas. A. Roppe, Selden B. Stevens.

For Congress.—Marcus L. Ward, Senator.—John W. Taylor, Assemblyman.—James F. Sherrill.—James S. Gamble, County Clerk.—Frederick H. Moore.—Alfred P. Munro, W. W. Vreeland, Herman Stoeckel.

MARRIAGES.

TRIMBLE—TURILL.—In San Francisco, October 8, by Rev. John Hampson, D. H. Temple, of Bloomfield, N. J., to Mary H., daughter of the late Hon. Joel Turrill, of Oswego, N. Y.

SUFFERN—ADAMS.—At Montclair, on Tuesday, October 23, by Rev. W. I. Buddington, D. D., Edward L. Suffern to Alice De Blieker, daughter of P. C. Adams. No cards.

DEATHS.

MONDAY, Oct. 23, after a short illness, HENRY E. REEDMAN. Funeral service on Thursday, Oct. 31, in Westminster Church, Bloomfield, at 12 o'clock.

TUESDAY, Oct. 23. Suddenly, in New York, LUTHER C. GALLAGHER, aged 35. Funeral service at the residence of his father, Rev. J. S. Gallagher, Bloomfield, on Friday, Nov. 1, at 12 o'clock.

TUESDAY, Oct. 23, of consumption, Anna, wife of Michael Riley, and daughter of Mrs. Anastacia Powers of Bloomfield, aged 34.

A Good Chance to Make Money!

A LOT OF  
Mechanical Toys!  
For Sale or Exchange for other Property.

Apply at Edgewood Works, Bloomfield, N. J.

O. P. LADD.

C. H. R. BRUETT,

At Davis' Old Stand, Bloomfield Avenue,

SELLS CHEAP FOR CASH.

Groceries and Provisions,

WOODEN AND WILLOW-WARE,

CROCKERY.

Glassware and Yankee Notions.

Mr. Bruett being unable to write, in consequence of his early education having been neglected, he has not written, and therefore will not open, any Account Books. This will let him why his customers to bring the Cash along with them when they come to buy.

His Doubtless now Bloomfield find him fit singular and in better condition, in credit and in favor. Dr. Grie, neither sumit, reftal in Geffent. Oct 18.

JAMES HUGHES,

SURVEYOR.

Opposite Masonic Hall, Railroad Avenue,

BLOOMFIELD. Sept 12.

A. G. McCOMB,

CIVIL ENGINEER and SURVEYOR,

Office, No. 1 FRANKLIN ST.

BLOOMFIELD.

ISaac VAN WINKLE & SON,

MABONS AND BUILDERS,

MONTGOMERY STREET,

BLOOMFIELD, N. J.

MADE TO ORDER AT

600 BROAD ST., NEAR CITY HALL,

NEWARK, N. J.

These Shirts are made of the best material and finest workmanship, and warranted superior.

BEAUTY—COMFORT—ECONOMY.

HARRINGTON'S

Perfect Fitting Shirts!

MADE TO ORDER AT

600 BROAD ST., NEAR CITY HALL,

NEWARK, N. J.

MISS MICHELL & MRS. KNEVITT'S

ENGLISH & FRENCH DAY SCHOOL

FOR YOUNG LADIES & LITTLE GIRLS,

2 WASHINGTON AVENUE,

BLOOMFIELD, N. J.

WILL OPEN SEPTEMBER 23, 1872.

Miss Michell having had many years experience in teaching, and having just closed a seven years' connection with Edgeworth School, Mt. Vernon Place, Baltimore, Md., hopes for the confidence of parents in this new enterprise.

Sept 12.

THE BLOOMFIELD GAZETTE, NOVEMBER 2, 1872.

more especially to Margaret, who—unscrupulous or superstitious mind seemed to forebode some impending evil, though she knew not what. Perhaps she apprehended she might never see her Jesus again. But

she went on her mountain tour, but in

this stormy night it would of course be ob-

scure dark and frightfully dismal. More-

over, wild beasts not unfrequently made

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